Subject: Re: Rubberband box for object graphics
Posted by David Fanning on Fri, 11 Feb 2005 14:10:11 GMT
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"Rainnie, JA \(John\)" <J.A.Rainnie@rl.ac.uk> writes:

> I'm delving into the IDL graphics objects, and specifically I wish to
> develop a plot window using the IDLgrPlot class. Thanks to several
> examples (mostly Dave Fanning's xPlot) I've mananged to do this.
> However, I really need to implement a rubberband box so the user can
> interactively zoom into this plot (like DF's zPlot). The conversion from
> device to data coordinates is of course done in direct graphics with the
> Convert_Coord function. However, I can't find any examples of how this
> is done for object graphics.
>
> Has anyone done this - and are there any examples you can direct me to.

I've never done this, but my little program SCALE_VECTOR
has solved an awful lot of problems like this for me, and
I think that is where I would start. You will know the
endpoints of your box (in the X direction), and you will
know the X extent of your View in the draw widget, so
the conversion would look something like this:

```
dataCoords = Scale_Vector([boxPt[0], boxPt[1]], view_x[0], veiw_x[1])
```

Scale_Vector is found is the usual place. :-)

Cheers,

David

P.S. After writing the code for Scale_Vector (I had a flash
of insight after working on an object graphics project) I
promptly forgot how it is that it works. But it does work, spectacularly
well. So I think whatever the algorithm is in there, that is what you
want to employ in any object graphics coordinate conversion
routine.
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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/